How Core Technologies Determine What You Can and Can't Claim for R&D Tax Credts

10/06/2026 10:51 am IST

An R&D tax credit claim is not a record of what the company did. It is a structured argument that specific activities constitute qualifying R&D under the relevant framework and that the expenditure associated with those activities is eligible for relief.

The strength of that argument depends almost entirely on how the R&D is structured and documented. The most common structural weakness in claims that get challenged or reduced is not that the work was not genuinely innovative, it is that the connection between the work and the underlying technology being advanced was never made explicit.

Why the Technology Defines the Claim, not the Project

R&D tax credit frameworks in Ireland, the UK, and Canada each use their own terminology, but they share a common structure: qualifying activity is defined in terms of advancement of a scientific or technological base, resolution of scientific or technological uncertainty that a competent professional could not readily resolve, and systematic investigation rather than ad hoc problem-solving.

These criteria are written at the technology level, not the project level.

A project is a commercial vehicle. It has a deliverable, a budget. A technology is what the project is advancing. The claim must demonstrate that specific work within the project was directed at advancing that technology beyond what was known and not just that the project was technically complex.

This matters because the same piece of work can look very different depending on how it is framed. An engineering challenge resolved during a client project looks like a cost of delivery when framed at the project level. It looks like qualifying R&D when connected to a named core technology, a documented state of the art, and a traceable investigation that pushed beyond it.

The three Identification Streams and their Claim Implications

As covered in the reference article on core technologies, R&D flows into a company's technology base through three streams: strategic development, product and service delivery, and process optimisation.

Each stream has different claim implications. Strategic development R&D is usually the most straightforward to claim. It is purpose-built, visible, and typically well-documented. The challenge is that it often represents only a fraction of the qualifying activity in the business.

Product and service delivery R&D is where most under-claiming happens. Work done in the course of customer projects that resolves genuine technological challenges is qualifying R&D. Anything that goes beyond what a competent professional could achieve using standard techniques is what falls into this definition. But it only appears in the claim if it is identified and connected to a core technology at the time it happens. If it is treated as a cost of delivery and absorbed into project margins, it never makes it into the claim.

Process optimisation R&D is similarly underrepresented. Improvements to manufacturing processes, software delivery pipelines, or production systems that involve genuine advancement of the underlying technology, not just efficiency gains, are qualifying activity. The distinction between standard operational improvement and qualifying R&D in this stream is one of the most contested areas in audit, and it is most defensible when the core technology being advanced is named and the advancement is documented.

The Fuzzy Zone and How the Framework Navigates it

ReaDI-Watch refers to the boundary between standard professional engineering and qualifying R&D as the Fuzzy Zone. This presents a real and recurring challenge in claim preparation, even if it is not a formally defined concept in the tax frameworks themselves.

In manufacturing and engineering, the Fuzzy Zone is where experienced engineers apply advanced techniques that are, for them, standard practice but that may represent genuine advancement of a core technology when assessed against the broader state of the art. In software, it is where experimental development shades into standard coding. In MedTech, it is where established validation approaches are pushed beyond their defined scope.

The Core Technologies framework navigates the Fuzzy Zone by anchoring the assessment in the technology rather than the activity. When the state of the art in a named technology area is documented, and when specific investigations are connected to that technology and their advancement recorded, the question of whether work qualifies becomes a traceable, documentable question. It is no longer a subjective judgement made under pressure at year-end.

What this Means for Your Next Claim

The practical implication for a finance director is straightforward: a claim built on a structured core technology record is more complete, more defensible, and less dependent on reconstruction than one built purely on project records.

More complete, because all three identification streams are captured and not just the strategic development work that is easy to see. More defensible, because the technology-level evidence exists contemporaneously rather than being assembled after the fact. Less dependent on reconstruction, because the engineers who did the work connected it to the right technology at the time.

If you would like to understand how this looks in practice, specifically what an audit-ready core technology register contains and how it supports a claim, the next article in this series covers exactly that.